From boatanchors@theporch.com Thu Oct 31 13:24:01 1996
From: rcmorris@mars.ark.com (ray)
Subject: --bulbs--
Message-ID: <199610302055.MAA24729@mars.ark.com>

Greetings Group!

Does anyone have a source of info on "bulbs" - their voltage, current rating, etc. The ARRL handbooks give some info on the more common types but some of the ol' military lamps have no info on them . I realize that a lot of them are 28V but.....

TIA. Ray. VE7FBJ. rcmorris@mars.ark.com

From boatanchors@theporch.com Thu Oct 31 10:17:51 1996
From: vancleef@netcom.com (Henry van Cleef)
Subject: Re: 0B2 with orange glow?
Message-ID: <199610310617.XAA12730@netcom19.netcom.com>

As Bob Okas discourses

>
> Clark and Co.:
> I've run across a similar occurance, and when I saw it, I thought
> the tube was drawing too much current with that neon-orange glow. A
> careful measurement proved otherwise and after a brief period of
> operation, it settled down into the normal purple-blue glow. Perhaps
> Professors van Cleef and Ornitz might enlighten us further...
>
>

Perfessers? I think this is one place where "chemistry" is "physics" and vice versa.

The gasses used in VR tubes are mixes of noble gasses---helium, neon, argon. From the chemist's perspective, what makes them "noble" is that they are all at the right end of the periodic table, and have no valence value, because their valence electron bands are filled. So they don't react with anything to form compounds.

In terms of "new clear fizziks," the gimmick is that if you add energy, you can make electrons jump out of the valence band into the conduction band. Just any old energy won't do---you can't really go around kicking electrons with your shoe. Once the electrons are in the conduction band they do what "conduction" implies----for a while. Then they fall back into the valence band. In physics, this is called "returning to ground state." When they do that, they release the energy that was put in to make them jump up into conduction, and are very specific about how they do that. They release it as electromagnetic energy of a specific wavelength. Those three gasses do so in the visible light band, so you can see it happening----they glow.

The energy put into the system doesn't have to be at a specific wavelength. It just has to be "enough" to kick the electrons up into conductance state. They remove the energy needed from the energy provided by the source. In the case of a VR tube, the energy is provided by (you guessed it) an arc between the electrodes. Since the energy removed by pumping the electrons is at a specific energy level, the arc is forced to have a step potential gradient across it. That's the 75/90/105/130/150 volts these tubes maintain. There are tons of gas atoms in there, so if you put more energy into the system, more electrons get pumped. The glow gets brighter, but the step gradient is maintained, because additional atoms are being pumped.

Now, if you had just one noble gas type in the tube, and if all that light generated by electrons falling back to ground state could escape as light through the glass, these tubes would have the brilliance of little suns. Fortunately or unfortunately, depending on how you view it, most of the light doesn't escape. It shakes up other atoms, bangs against the electrodes and even against the glass envelope. When you go around whacking things and making them wiggle and dance, you end up generating heat. Remember the two laws of thermodynamics:

1. You get as much energy back out of a system as you put in. (Conservation of Energy).
2. Heat flows from hot to cold (as Sadi-Carnot put it). In this system, view it as "high quality" energy (i.e., short-wavelength quanta) degrade to "low quality" energy (long-wavelength quanta). That is known as "entropy," and even copped by the social scientists to mean that in a group that has geniuses and dunces, everybody turns into a turkey if they interact long enough.

In a VR tube, you are putting in energy in the form of an electric current across a voltage gradient, which is "watts," and getting it out as light and heat, so the VR tube is an energy converter. However, since the process of pumping electrons takes "quanta" of energy to convert, the voltage gradient is quite constant over a range of current.

The actual operating voltage across the tube is conrolled by the gas mix. I am not going to go into a lot of detail with this, but remember that if the energy is "enough," you will kick electrons out of ground state in the valence band into the conduction state. A higher-energy gas which operates in the violet range, will "kick" a lower energy gas which operates in the orange-red range. The mix determines how much of the violet-end light energy is soaked up pumping red-end gases vs. just making even lower-quality heat energy.

So the tubes for different voltages glow different colors, with violet predominant in a VR-150 and orange-red predominant in VR-75.

For those familiar with them, the helium-neon gas laser is a close cousin. In this case, the gas mix is in a long thin tube, with focusing mirrors at either end, and a small hole in one mirror. Typically the gas is pumped physically by an RF field surrounding the tube (250 Mhz. oscillator and a coil around the tube). The energy released when electrons fall back to ground state, if it is oriented along the tube axis, heads for one of the mirrors, and bounces back and forth, hitting other atoms, and building up into standing waves bouncing back and forth between the mirrors. Light pointed out the hole in the mirror having the hole escapes as a visible beam. This is analogous to the output coil in a class C amplifier, which resonates at a frequency as a result of being "pumped" by in-phase pulses from the driving amplifier.

Remember that "light" is a specific case of "radio frequency" with wavelengths between about 3500 and 7000 angstroms. The VR tube is like a tank circuit responding to static. It will "ring" at its resonant frequencies, and absorb energy from the static if connected to a load. The laser is like a transmitter class C amplifier, giving gain when "pumped" with resonant frequency pulses.
--
===
Hank van Cleef
E-mail vancleef@netcom.com or vancleef@tmn.com
===

From boatanchors@theporch.com Thu Oct 31 13:24:01 1996
From: cmthomp1@facstaff.wisc.edu (Clark M. Thompson)
Subject: 0B2 with orange glow?
Message-ID: <199610301906.NAA99265@audumla.students.wisc.edu>

Hi everyone,

In the past, whenever I encountered an 0B2 regulator it glowed blue in operation (like all the 0A2s I've seen). But the 0B2 that came in my NC-183D glows orange! It seems to be functioning just fine (steady 105 V) so I assume this isn't some bizzare failure condition. I'm at work now, and I don't recall the brand of the tube...

My guess is that it's using a different gas than the common blue glow version (Neon, perhaps?) Can anyone shed some "light" on this?

73,

Clark, KD9QI

cmthomp1@facstaff.wisc.edu

From boatanchors@theporch.com Thu Oct 31 13:24:01 1996
From: okasb@rex.mtv.gtegsc.com (Bob Okas)
Subject: Re: 0B2 with orange glow?
Message-ID: <9610302205.AA19996@rex.mtv.gtegsc.com>

Clark and Co.:

I've run across a similar occurance, and when I saw it, I thought the tube was drawing too much current with that neon-orange glow. A careful measurement proved otherwise and after a brief period of operation, it settled down into the normal purple-blue glow. Perhaps Professors van Cleef and Ornitz might enlighten us further...

Bob - N3MBY

From boatanchors@theporch.com Thu Oct 31 15:58:53 1996
From: howellh@winthrop.edu
Subject: 390-A
Message-ID: <96103114085483@winthrop.edu>

```
WINTHROP UNIVERSITY                                Electronic Mail Message
                                         Date:     31-Oct-1996 02:03pm EDT
                                         From:     Haney Howell
                                                   HOWELLH
                                         Dept:     Mass Communication
                                         Tel No:   323-4534

TO:  Remote Addressee                      ( _smtp%"boatanchors@theporch.com" )
```

Subject: 390-A

My friend and I just finished a going-over of the newly acquired 390-A. Incredible selectivity (much better than my early Collins 390A) and tuning (although stiffer, it locks on SSB much better). Now to get the older radio on the bench.

Couple of small needs. 1) Need the shield/cover for the calibrator. Although it's fun to chase the signal on its excursions, don't think it will settle down without the lid! 2) The line meter is kaput. Not a critical item, but if anyone has one lying around...

Finally, has anyone thought about crafting top and bottom covers for these beast? Think the $165 asked for same in the Yellow Sheets is a bit steep! I've been eyeing the brides cookie sheets and such, but nothing so far!

A thousand digest. Wow!

Haney no2n <howellh@winthrop.edu> Rock Hill, SC

From boatanchors@theporch.com Thu Oct 31 10:17:51 1996
From: Glenn Finerman <GFINER@nms.com>
Subject: RE:455 kHz CW Filter Availability
Message-ID: <s27888cd.083@nms.com>

Bill Sorsby commented;

re>I understand from recent posts that Collins CW bandwidth (eg, 500
>Hz) mechanical filters are expensive. Not being a purist but in the
>market for one now, I'm wondering what other options people have
>found to be available for an IF of 455 kHz. <snip>
> Similar impedances would be nice but alternative impedances
>could be dealt with

I posted a similar comment a few weeks ago with very few responses received. I think it's worth investigating considering the cost of original S-line and 75A series mechanical filters.
What about crystal filters made for the current crop of sand box rigs?
My original thought was that the impedance difference between crystal and mechanical might be a problem. What about the Fox-Tango 455kc filters?
I just paid a bunch-O-money for a 500hz filter for my 75S3-B and I don't want to do that for ALL my receivers!

73.........................Glenn   N2BJG   gfiner@nms.com

From boatanchors@theporch.com Thu Oct 31 15:58:53 1996
From: "Barry L. Ornitz" <u856010@eastman.com>
Subject: RE:455 kHz CW Filter Availability
Message-ID: <Pine.ULT.3.91.961031121633.19348B-100000@dua150.kpt.emn.com>

Glenn Finerman asked:

> What about crystal filters made for the current crop of sand box rigs?

> My original thought was that the impedance difference between crystal
> and mechanical might be a problem. What about the Fox-Tango 455kc filters?

Most modern crystal filters are designed for low-impedance drive and termination (typically 2K ohms). It is also difficult to find them commercially at frequencies below a few MegaHertz. The 3 to 6 MHz range and 10.7 MHz are the most popular. Modern Collins mechanical filters are also designed for low impedances. The old filters Collins made for vacuum tube radios typically were designed to replace an IF transformer having a drive impedance around 10 to 25 Kohms and a termination impedance of 50 to 100 Kohms or more (i.e. plate load and grid input impedances). Modern low impedance filters will require additional impedance matching (and usually additional gain too) to be suitable in older tube rigs.

Ceramic filters are available from Murata and TDK at 455 kHz but all I have ever been able to find commercially are the cheap 5 to 10 kHz BW filters. These manufacturers make much better filters including some suitable for CW that are listed in their catalogs but I have never seen them for sale by a U.S. vendor. These are low impedance filters, however.

I am not familiar with the Fox-Tango filters so I cannot comment there. I would assume they are low-impedance filters for the solid state rigs.

Collins now makes a new line of "low cost" torsional filters (as opposed to the older disk-wire filters) with reasonable specs. Again these are low impedance filters and Collins' idea of low cost differs from mine! In large quantities, you can get the prices of the SSB filters to below $40 each (1000 lot) but the individual price is close to $100 and Rockwell's filter division basically does not like to sell individually anyway. I believe this division must be really small since the telephone number listed in their literature does not ring in sales but in one of the two engineer's offices. Surely they must be bigger than this!?

I got into this while thinking about modifying a Drake R-4 series receiver to use a Collins filter. In many ways the R-4, R-4A, and R-4B are superior to the R-4C EXCEPT in selectivity. My idea was to add additional circuitry to use a outboard filters while retaining the passband tuning Drake fans love. I was looking for commercial filters that can be readily purchased, but the new Collins units were too expensive for me.

73, Barry L. Ornitz WA4VZQ ornitz@eastman.com

From boatanchors@theporch.com Thu Oct 31 15:58:53 1996
From: anders@autopsy.corp.sgi.com (Greg Anders)
Subject: RE:455 kHz CW Filter Availability
Message-ID: <9610311027.ZM25465@autopsy.corp.sgi.com>

FYI, if you haven't checked out Kiwa Electronics its worth a look.

http://www.wolfenet.com/~kiwa/index.html

From boatanchors@theporch.com Thu Oct 31 15:58:53 1996
From: Bill Sorsby <bill.sorsby@dlep1.itg.ti.com>
Subject: RE:455 kHz CW Filter Availability
Message-ID: <199610311925.NAA10022@lesol1.dseg.ti.com>

At 12:31 PM 10/31/96 -0600, you wrote:

>
> FYI, if you haven't checked out Kiwa Electronics its worth a look.
>
> http://www.wolfenet.com/~kiwa/index.html

Indeed it is! They seem to make a number of very good filters suitable for AM, in bandwidths from 2.7 to 8.0 kHz. Alas, a call to Kiwa revealed that they have no filters with bandwidths less than 2.7 kHz and no plans to develop any.

Here are some specs from their web page:
"Standard Filter Module Specifications
Operating Frequency: 455 kHz
Insertion Loss: 0 dB
Input Impedance: 10 kohm
Ouput Drive Impedance: 100 ohms
Shape Factor: <1.8 (typ 1.65)
Ultimate Rejection: minimum 68 dB - typically 72-73 dB
Operating Voltage 4.5 to 36 VDC @ 10 ma
Dimensions: 0.9in w x 1.9in l x 0.75in h (23mm w x 45mm l x 19mm h)"

Their "Standard Filter" price is $45. Note that the filter comes with a built-in amplifier and impedance matching. The only drawback I see is that one would need to provide a low voltage source of DC, which wouldn't be difficult in many applications.

Regards,
Bill Sorsby, N5BU

****
bill.sorsby@dlep1.itg.ti.com

Views expressed herein are no one's fault but mine.
****

From boatanchors@theporch.com Thu Oct 31 15:58:53 1996
From: mknudsen@lucent.com
Subject: RE:455 kHz CW Filter Availability
Message-ID: <9610311933.AA01199@bock.ih.lucent.com>

There are good alternatives. You can get Kiwa filters,
and if their impedances are too far off, Kiwa sells a universal
filter with in/out emitter followers (?) that match it to any impedance.

A fine member of this group told me that under the 75A4 there is a perfect
place where you can clamp in a sheet of copper and feed most any filter
from wires you add underneath the xtal filter sockets. The copper
sheet isoloates the input from output. All reversible.

I forget whether Kiwa sells for IFs besides 455, but they do
have a Web page (but my URL for it is outa date).

You can probably scrounge AM filters out of any garage sale Walkman
or portable radio, tho the impedances will be low.
73, mike k aa9rg

From boatanchors@theporch.com Thu Oct 31 13:24:01 1996
From: Glenn Finerman <GFINER@nms.com>
Subject: 51S-1 6kc filter Mod
Message-ID: <s27761f2.034@nms.com>

I took a chance and ordered a 500kc, 6kc bandwidth Mechanical
filter from Fair Radio. It's comes on a Collins 618T module and
cost $40.00. It's the same one described in the latest ER as a mod
for the 51J-4. I plan on installing it in my 51S-1 in place of the
5kc transformer arrangement. Has anyone performed this mod
using the surplus filter from Fair? How about the Collins factory
mod to add the 6kc filter? Anybody have the doc's on this?

Thanks........Glenn   N2BJG   gfiner@nms.com

From boatanchors@theporch.com Thu Oct 31 13:24:01 1996
From: Glenn Finerman <GFINER@nms.com>
Subject: 51S-1 serial number
Message-ID: <s2775f04.031@nms.com>

re>What is the serial number on yours? Mine is #495.

Checked lunch time...... My 51S-1 is serial #2815

From boatanchors@theporch.com Thu Oct 31 13:24:01 1996
From: David Hollander <davidh@getnet.com>
Subject: Re: 51S-1 serial number
Message-ID: <Pine.BSI.3.93.961030132928.8783A-100000@gn2.getnet.com>

I have a 51S-1 which is serial #5

Dave Hollander N7RK
davidh@getnet.com

On Wed, 30 Oct 1996, Glenn Finerman wrote:

> re>What is the serial number on yours? Mine is #495.
>
> Checked lunch time...... My 51S-1 is serial #2815
>
>
>

From boatanchors@theporch.com Thu Oct 31 15:58:53 1996
From: Steve Ellington <n4LQ@igLou.com>
Subject: 75A4 and 312 both SOLD
Message-ID: <32790C1E.29FF@igLou.com>

Thanks to all who inquired. Both are gone.

From boatanchors@theporch.com Thu Oct 31 13:24:01 1996
From: carl yaffey <cyaffey@sprynet.com>
Subject: 75A4 problem revisited - a quiz for you
Message-ID: <2.2.32.19961030182457.00701864@m1.sprynet.com>

OK, I've determined that the T6 sounding signals I'm experiencing with my A4
are not due to power supply problems (no AC measured). Here's what happens
as I advance the RF gain with the calibrator on and the AF gain at about 5:
RF at 0 - 7, no sound
RF at 8, calib. signal appears and sounds buzzy (T6 - T7 note)

RF at 8.5, calib. signal gets louder and starts sounding like a more like a tone (T8)
RF at 9 - 10, calib. sig loud and sounds normal (T9)
Any guesses as to what's wrong or what stage the problem is in? I'm going to start checking tubes and measuring voltages/resistances but thought it would be interesting to see what y'all think beforehand. 73, Carl K8NU

Carl Yaffey K8NU (ex-W4EZB) cyaffey@sprynet.com 614 268 6353 Columbus OH
Banjo player for One Riot One Ranger, independent software developer.

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                   /~~\\        ,    , ,
                  |#===||==========#***|
                   \__//            ` `
```

From boatanchors@theporch.com Thu Oct 31 13:24:01 1996
From: "James C. Owen, III" <owen@apollo.eeel.nist.gov>
Subject: RE: 75A4 problem revisited - a quiz for you
Message-ID: <54597.owen@apollo.eeel.nist.gov>

In message Wed, 30 Oct 1996 12:28:15 -0600 (CST),
  carl yaffey <cyaffey@sprynet.com> writes:

> OK, I've determined that the T6 sounding signals I'm experiencing with my A4 are not due to power supply problems (no AC measured).
>

Carl I think that you probably have Filament to Cathode leakage in some tube. It could be the RF amp but may be just about any. I think the reason it acts like it does with the RF gain and the calibrator is that the amount of AC is very small and when receiving a weak signal (RF gain turned back and weak calibrator) the % of AC is much greater than when the signal is strong (Full RF gain). The problem could be in any stage that the gain is controlled by the RF gain which is the complete AGC line, I think. Shouldn't be hard to find. If you're sure it's not on the PS line then it can only be coming from the filament line since that's the only other source of AC. 73
Jim K4CGY

From boatanchors@theporch.com Thu Oct 31 13:24:01 1996
From: Bob Roehrig <broehrig@admin.aurora.edu>
Subject: Re: 75A4 problem revisited - a quiz for you
Message-ID: <Pine.ULT.3.95.961030132818.11435A-100000@admin.aurora.edu>

On Wed, 30 Oct 1996, carl yaffey wrote:

> OK, I've determined that the T6 sounding signals I'm experiencing with my A4 are not due to power supply problems (no AC measured).

> Any guesses as to what's wrong or what stage the problem is in? I'm going to
> start checking tubes and measuring voltages/resistances but thought it would
> be interesting to see what y'all think beforehand. 73, Carl K8NU

Maybe cathode-filament leak in a tube?

E-mail broehrig@admin.aurora.edu 73 de Bob, K9EUI
CIS: Data / Telecom Aurora University, Aurora, IL

From boatanchors@theporch.com Thu Oct 31 10:17:51 1996
From: "Lon W. Cottingham" <k5jv@swweb.net>
Subject: Address for ART/13 T-47 Compendium (160 meters)
Message-ID: <199610311551.JAA00727@uro.theporch.com>

Sorry I failed to give my mailing address in the original posting. I am ok in Call Books after 1991. Address is:

Lon W. Cottingham
1110 Golden Bear Ln.
Kingwood, TX 77339

I have had 11 requests for the 4 remaining copies as of the last time I checked my E-mail. I am going out now to make more copies. Also I have had input from several other Hams who have ART/13 info who have offered to send it to me. I will look it over and see if it is new. If so I will add it to the Compendium at that time. And, of course, any additions will be available to anyone who wants them.

From boatanchors@theporch.com Thu Oct 31 15:58:53 1996
From: KA9EGW@aol.com
Subject: AOL users--boatanchors FINALLY!
Message-ID: <961031132713_134672501@emout06.mail.aol.com>

Just a note to let AOL users know rec.radio.amateur.boatanchors is now (FINALLY!) available through the AOL newsgroup function...

From boatanchors@theporch.com Thu Oct 31 15:58:53 1996
From: harlan@aciss2.ENET.dec.com
Subject: ARC-58 ??????
Message-ID: <9610311914.AA14044@us2rmc.zko.dec.com>

Yo' Y'all

Anyone ever play with one of these critters??? Looking for a different winter project this year and found a guy who has the whole mess(rig,tuner,control box,manual ,setting books,etc,etc) for what seems to me to be a fair price.

I'm aware of the 400hz selsyn requirements. Any comments,cautions or considerations would be appreciated.

TIA..
Dan N8ETQ

From boatanchors@theporch.com Thu Oct 31 13:24:01 1996
From: aafradio@erols.com
Subject: ART-13 160m ops
Message-ID: <3277CC90.86E@erols.com>

Larry's quite right on the LF tuning units...the O-16 and O-17 only cover 200-600 and 200-1500kc. The latter can be tweaked to 160 with little effort, the former takes a bit more. Having restored a couple of these, with half dozen or so still in the round tuit queue, I might be able to give some additional insight. The CDA-T oscillator was intended to bring crystal control to the set, though with the famous stability it's curious that it was considered a necessity. The CDA-T requires the transmitter to be modified to a -B configuration, with a multipin Jones plug and wiring to handle the ten channel selections. The O-16 and O-17 LF units drive the 813 directly from a 1625 oscillator - making it essentially a two tube transmitter, and the output power naturally suffers a bit. The CDA-T uses a pair of tubes (1625 and 6AQ5, as I recall...the 1625 for "LF" crystals and the 6AQ5 for HF) and threads the output through one of the mainframe HF multiplier stages, allowing more power output. There is an added switch on the front panel of the ART-13B that adds a padding capacitor to one of the multiplier stages so it can be resonated down to 1700kc. Not a bad performer, though it does make you rock bound. Looks like it would be pretty easy to use the 6AQ5 as a buffer from an external VFO, tho I've never tried it in that mode.

73,

Mike Hanz KC4TOS
AAFRadio@erols.com
Herndon, VA

From boatanchors@theporch.com Thu Oct 31 15:58:53 1996
From: Glenn Finerman <GFINER@nms.com>
Subject: re:ART/13 T-47 on 160 meters
Message-ID: <s2788d6e.088@nms.com>

Lon K5JV wrote;

re>The best way that I have found to use the T-47 on 160 is as
>explained in the Compendium. This method used either of the two
>available low frequency oscillator units that fit into an available space
>on the front panel.
<snip>
>This modification lifts a couple of wires and adds two relays and a
>switch.

Are these LFO's you mention above actually available? If not are they
simple enough to build from scratch (copied?)
Don't see anything like that in the Fair catalog related to the ART-13.

73...................Glenn N2BJG   gfiner@nms.com

From boatanchors@theporch.com Thu Oct 31 10:17:51 1996
From: Bill Sorsby <bill.sorsby@dlep1.itg.ti.com>
Subject: AWA Auction Results
Message-ID: <199610311611.KAA15362@lesol1.dseg.ti.com>

The November issue of Antique Radio Classified lists the AWA Auction
results. I continue to be amazed at what some of the ham gear sold for.

Abbott TR-4 2m rcvr, e, $45
Collins 75A-3, 2 filters, w/manual, e, $370
R-390A, non-orig tuning knob, g, $170
GT-550 w/PS, g $55
German "HRO" coil set, 3 in box, $140
S-19, vg $45
S-40 w/manual, vg, $35
Sky Buddy, g, $40
S-85, book, e $40
SX-130, w/manual, g, $45

SX-28, needs work, g, $160
SX-42 w/R-42 speaker, g, $190
HC-10 SSB adapter, less case, vg, $70
HQ-129X, less case, f, $35
HQ-170, non-clock model, w/spkr, $100
SP-400-SX, modified, g, $35
AT-1, vg, $75
MT-1 "Cheyenne", w/mic, less PS, $40
SB-300/401 transmitter, w/cables, w/book, vg, $60
SB-301/401 rcvr/xmtr, w/manual, $60
Homebrew 5-tube regen rcvr, w/Bud coils in boxes, vg, $45
Viking I, wrong cabinet, recapped, $50
Span-Master, g, $20
KT-340, vg, $40
Millen "vari-arm" VFO, vg, $65
BC-1306 xcvr, NT, less guard bars, e, $40
BC-454, NIB, $25
T-18/ARC-5, NIB, $65
FB-7, no PS, 2 pairs of coils, vg, $250
HRO-5TA-1, 4 coil sets, w/box and spkr, hmbrw PS, vg, $170
NC-101X, S-mtr variant, w/spkr, vg, $180
NC-188, w/spkr, g, $70
NC-44A, w/manual, g $80
SW-3, NT, no coils or PS, modified, f-g, $130
SW-54, vg, $22
RME-4350 rcvr and 4301 SSB selector, w/manual, g $130
RME-4350 rcvr, less case, vg, $35

Thought folks might find this interesting.

Regards,
Bill Sorsby, N5BU

****
bill.sorsby@dlep1.itg.ti.com
Views expressed herein are no one's fault but mine.
****

From boatanchors@theporch.com Thu Oct 31 15:58:53 1996
From: Al Klase <alklase@prolog.net>
Subject: Re: AWA Auction Results
Message-ID: <199610311721.MAA28420@ns1.ptd.net>

At 10:15 AM 10/31/96 -0600, Bill Sorsby wrote:
>
>I continue to be amazed at what some of the ham gear sold for.
>

I'm curious whether Bill and the rest of you think the prices were too high or too low. I've attended this auction on several occasions. It's communication gear only, and is generally attended by knowledgable collectors with money in their pockets. Having bought and sold boatanchors in this auction and others and hamfests in the Mid-atlantic states, I think these are pretty indicative of the going price of most of this gear when both the buyer and seller know what they're doing.

73, Al

Al Klase - N3FRQ
alklase@prolog.net
Flemington, NJ

From boatanchors@theporch.com Thu Oct 31 15:58:53 1996
From: Chuck Penson <penson@sci.mus.mn.us>
Subject: Re: AWA Auction Results
Message-ID: <3278EA0B.3475@sci.mus.mn.us>

Bill Sorsby wrote:
>
> The November issue of Antique Radio Classified lists the AWA Auction
> results. I continue to be amazed at what some of the ham gear sold for.

My opinions on the prices...

> AT-1, vg, $75 -- A good buy. I would have bid a little more.

> MT-1 "Cheyenne", w/mic, less PS, $40 -- Ahh, about right, I think. Though the original mic should have boosted the price a bit...maybe.

> SB-300/401 transmitter, w/cables, w/book, vg, $60 -- The 401 alone? A good price.

> SB-301/401 rcvr/xmtr, w/manual, $60 -- A steal (with or without the cables and books), sassuming they were in good condition. .

--
Chuck Penson
WA7ZZE

penson@sci.mus.mn.us
612.221.4510 voice
612.224.5092 fax
http://comped.sci.mus.mn.us

Standard Disclaimer: The opinions expressed are etc. etc. ...

"Nothing is too wonderful to be true" -- Michael Faraday

From boatanchors@theporch.com Thu Oct 31 15:58:53 1996
From: mknudsen@lucent.com
Subject: Re: AWA Auction Results
Message-ID: <9610311924.AA01191@bock.ih.lucent.com>

Thanks. Amazing how *low* the ham gear prices were across the board. Big money probably went to xtal sets, Scotts, and novelty radios. WOnder how Catlin is holding up?
73, mike k aa9rg

From boatanchors@theporch.com Thu Oct 31 15:58:53 1996
From: Bill Sorsby <bill.sorsby@dlep1.itg.ti.com>
Subject: Re: AWA Auction Results
Message-ID: <199610312023.OAA15932@lesol1.dseg.ti.com>

At 11:22 AM 10/31/96 -0600, you wrote:

>I'm curious whether Bill and the rest of you think the prices were
>too high or too low. I've attended this auction on several occasions. It's
>communication gear only, and is generally attended by knowledgable
>collectors with money in their pockets. Having bought and sold boatanchors
>in this auction and others and hamfests in the Mid-atlantic states, I think
>these are pretty indicative of the going price of most of this gear when
>both the buyer and seller know what they're doing.

Al, I found it reassuring to see these prices. The only radio in the AWA auction which struck me as going for an excessive amount was the SX-28 for $160 in "good" condition but "needing work" (whatever that means).

It seems to me that many people asking high prices for radios fail to account for the cost of restoration, both in time and money. As I looked at the auction prices I wondered how many of the radios were working and/or had been "restored". If not, then the low prices might have reflected that.

Regards,

Bill Sorsby, N5BU

****
bill.sorsby@dlep1.itg.ti.com
Views expressed herein are no one's fault but mine.
****

From boatanchors@theporch.com Thu Oct 31 13:24:01 1996
From: Larry Keith <KQ4BY@IX.NETCOM.COM>
Subject: BA Haunts in Philly/NJ?
Message-ID: <3277847F.6058@IX.NETCOM.COM>

Gotta go to Moorestown, NJ (a few miles from Philly), on Sunday
evening. Will be there until Thursday morning.

Any suggestions for wasting my evenings other than Bookbinders? (I
already have that planned.. 8=)

73,

Larry, KQ4BY

P.S. No, I don't do Atlantic City.. They got enough of my money the
last time!

From boatanchors@theporch.com Thu Oct 31 15:58:53 1996
From: "Jim Berry" <basalop@eskimo.com>
Subject: Re: Ba Materials and shipping
Message-ID: <199610312154.NAA09268@mail.eskimo.com>

> Date: Mon, 28 Oct 1996 09:18:08 -0600 (CST)
> Reply-to: mack@mails.imed.com
> From: mack@mails.imed.com
> To: Multiple recipients of list <boatanchors@theporch.com>
> Subject: Ba Materials and shipping

> I was out looking for the soft foam for the inner boxes of the stuff

> went out to Target and WalMart looking for this foam, but found it at
> neither place. A friend of my wife reminded me where I found it last

> I had some of this stuff around from a hard drive that I received. It
> worked really well for the VTVM. I discovered that the stuff cuts

> I'm not sure if there is a BA use (we *are* a resourceful group), but

> I saw an interesting material at WalMart while looking for foam. They

> Ray Mack
> WD5IFS
> mack@mails.imed.com

Hi Heavy Metal Fans,

Have to throw in my 2 cents worth:

Stop at stores that sells computers, stereos, vacuum
cleaners, sewing machines etc. They have to pay money to have the
packing materials and boxes hauled away. Sure, much of the material
is custom for the product it designed to protect, but you can reshape it
to do the job you want. Alot of the stuff is returned to the stores as
rebuilt equipt and the packaging is what I guess they call a
"repack". Foam is squrted into plastic bags and these bags are used
to repack an item. These bags are easily reshaped because they are
kind of "mushy". Stop in and visit one of these shops. You can also
get some real good ideas on how sewing machines and computers are
shipped every day, by the thousands, and not damaged. Pack up an old
BA and roll it down a flight of stairs. If you did it right, no
damage will be done. If it gets thrashed, you didn't pack it good
enough. Please don't use your favorite BA for the first test down
the stairs.

73 Jim K7SLI

***
Jim Berry K7SLI. QTH: Marysville, Wa (Near Seattle)
Email: basalop@eskimo.com FAX: 360-659-1360
Ham Digital: K7SLI @ K7SLI.#NWWA.WA.USA.NA
***

From boatanchors@theporch.com Thu Oct 31 13:24:01 1996
From: mirage!pamars@uucp-1.csn.net (P.A.Marshall)
Subject: Re: BAs Forever! HB Tubes
Message-ID: <9610301837.AA20685@mirage>

William Hawkins writes:
>
> The April issue, eh? I think our tubes require a better vacuum than what one
> can make at home - even if you could find the other exotic materials that
> you need.
>
Hi Bill!

Well I don't have the gear required thats for sure, but anyone that thinks this was an April fool's issue joke first check out the article. You can send me a SASE and I'll make copies for all wishing same that do not have access to the issue in question.

Al Marshall
408 Oakwood
Angola, IN 46703

Al Marshall   "Real Radios Glow in the Dark"   almarshall@acm.org
1+219.665.5072   Mirage Computers, Inc.   pamars@mirage.angola.in.us

"The lyf so short, the craft so long to lerne." - Chaucer

From boatanchors@theporch.com Thu Oct 31 13:24:01 1996
From: radionostalgia@serv2.fwi.com (Jack C. Shutt)
Subject: Books For Sale & Wanted
Message-ID: <199610301934.OAA21811@serv2.fwi.com>

Hello Tube Fans:

I have the following books for sale (All prices +shipping):

1. Radiotron Designer's Handbook Third Edition (NOT THE BIG RED VERSION), F. Langford Smith, 8th printing, 1942. Good condition, a few water stains on cover. $10.00

2. Reference Data for Radio Engineers, Fourth Edition, ITT, fourth printing 1957. Good condition, binding a little loose in back. $8.00

3. Reference Data for Radio Engineers, Fourth Edition, ITT, thirteenth printing 1967. Good condition, a few water stains. $8.00

4. Fundamentals of Radio, Edward C. Jordan and others, seventh printing, 1942. Fair condition. All pages good but binding is loose. $6.00

I'm looking for Radio Handbooks, Iss. 1,2,5,6,7,11,14,16 17,21 and 22.

Also ARRL Radio Amateur's Handbooks Iss. 1 thru 9, and 1934 thru 1941, 1945,46,61,90, and 93 thru 95.

73, Jack, N9GT

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****************************************************************************
*********************************
Jack C. Shutt, N9GT
radionostalgia@mail.fwi.com
(219)493-3901




From boatanchors@theporch.com  Thu Oct 31 10:17:51 1996
From: anthonys@ix.netcom.com (Anthony Severdia)
Subject: Re: Collins Trivia - 160M?
Message-ID: <199610310852.AAA24074@dfw-ix5.ix.netcom.com>

~
Mike (aa9rg) you wrote:
>
>In a much earlier discussion, it was brought out that a lot of the
>fancy noise blankers or noise silencers (not just ANLs) of
>the 50s and 60s were aimed at those who still attempted to receive
>in the limited 160m band.  With the right rx hardware you could copy
>the 100 W QSO thru the LORAN pulses.

    Yes, I'm sure you are very correct.  But, some folks raising
families and providing uppardly-mobile housing at the time just could
not afford the the "fancy" newest whiz-bangs at the time. Something had
to give. <g>  AR was passed into the background in my circumstances.

>But it's certainly true that 160m disappeared from a lot of ham
>tx and rx during the '60s.  I now have gear that will cover it on CW
>and AM, but getting up a decent antenna is another matter,
>and I'm sure that keeps lots of us off that band.  73, mike k aa9rg

    Yah!  I'm now preparing to get on to 160M despite my small city
lot.  There is a pretty good AM contingent (with Boat Anchors) in my area
which makes it even more fascinating.  In my thinking, CW on 160 is for
the avid dx chasers <g>.  And, is doing very well to Asia.

    Many thanks for your refresher, Mike.  Take care.  73,

    -=Tony=-    W6ANV       San Francisco, CA


From boatanchors@theporch.com  Thu Oct 31 13:24:01 1996
From: mknudsen@lucent.com
Subject: Re: Collins Trivia - 160M?
Message-ID: <9610301934.AA00413@bock.ih.lucent.com>
```

In a much earlier discussion, it was brought out that a lot of the
fancy noise blankers or noise silencers (not just ANLs) of
the 50s and 60s were aimed at those who still attempted to receive
in the limited 160m band. With the right rx hardware you could copy
the 100 W QSO thru the LORAN pulses.

Not to mention 15 and 10m thru the unshielded ignition systems
of nearby cars (or your own). I remember being able to track
an old pickup track clear thru my small town on 10m.

But it's certainly true that 160m disappeared from a lot of ham
tx and rx during the '60s. I now have gear that will cover it on CW
and AM, but getting up a decent antenna is another matter,
and I'm sure that keeps lots of us off that band. 73, mike k aa9rg

From boatanchors@theporch.com Thu Oct 31 13:24:01 1996
From: "David L. Thompson" <thompson@mindspring.com>
Subject: Re: Collins Trivia - 160M?
Message-ID: <199610302146.QAA06747@itchy.mindspring.com>

All of the ART-13's I ever saw were 2 Mhz up.   The only ham rig collins
made that covers 160 is the KWM-380. Not a BA however.

Why?

Look back in your old QSTs and CQ's to the 40's, 50's and even 60's..much of
the country did not have any or almost useless allocations. The best you
could do was 500W day and 200W night.
It was well after 1970 that the band opened up to 1KW (now 1500W) from 1.8
to 1.999Mhz. The only reason Johnson carried 160 was thats where the VFO
was (Ranger, Viking Valient). Even with the restrictions the band was
popular with AMers and Cw Dxers.

I expect this to be a good year on 160..see you there!

Dave K4JRB

From boatanchors@theporch.com Thu Oct 31 10:17:51 1996
From: "Brian Carling" <bry@mnsinc.com>
Subject: Connector needed
Message-ID: <199610311204.HAA08251@user2.mnsinc.com>

Needed:
12-pin JONES connector, FEMALE, Cable end.

Anybody have one they can part with?
This is for a WRL DUO-BANDER 84 rig I just acquired.

Please e-mail me.
73 from Radio AF4K / G3XLQ in Gaithersburg, MD USA
bry@mnsinc.com
*** See the great ham radio resources at:
http://www.mnsinc.com/bry/

From boatanchors@theporch.com Thu Oct 31 15:58:53 1996
From: "Thomas A. Adams" <103360.2133@CompuServe.COM>
Subject: Copy of: VLF website glitch
Message-ID: <961031190510_103360.2133_JHL127-2@CompuServe.COM>

---------- Forwarded Message ----------

From: Thomas A. Adams, 103360,2133
TO: "Grant Youngman", INTERNET:nq5t@gte.net
DATE: 10/31/96 2:03 PM

RE: Copy of: VLF website glitch

Hello Grant.

I'm not sure what the problem is (my Netscape bookmark for that address works fine), but I have a DIFFERENT way into the U. of Iowa server that you can try. I am forwarding this message to BOATANCHORS in case others got the "Sorry Charlie" message you got.

It seems that Steve McGreevy, N6NKS, has his own home page, which is linked to the U. of Iowa server.

Try   HTTP://PW1.NETCOM.COM/~SPMCGRVY/INDEX.HTML

On the first page there is a click-on that says MCGREEVY GROUND BASED NATURAL VLF RADIO that will take you into a sorta side door to the U. of Iowa server, and allow you to download the files.

BTW, Steve's home page is a MUST SEE for VLF nuts like me.

Good Luck,

Tom, K9TA

From boatanchors@theporch.com Thu Oct 31 10:17:51 1996
From: DArney@gnn.com (Dan Arney)
Subject: CV-1722/URR
Message-ID: <199610311555.KAA09128@mail-e2b.gnn.com>

Hi Gang hope some one can help on this. I have a CV-1722/URR
Converter single sideband by TMC of Canada S/N 9 order # 2577-62.
Anyone have a manual for it? I have one for 577?

Will it work with R-388 -390 or 390-A or SP-600 JX-14? as I have
one of each.
any copy cost/postage gladly paid.
Thanks Hank KN6DI

From boatanchors@theporch.com Thu Oct 31 10:17:51 1996
From: lkayser@rideau.net (Larry Kayser)
Subject: Digests 365 to 999, available
Message-ID: <199610311310.IAA26332@mail.peterboro.net>

Greetings:

I have just put Digests 365 to 999 into storage here, in preparation for the arrival of Digest 1000 next. As I put them away I thought I might be of service to some of you by providing the occasional fill for missing digests. I might of course be missing the same ones you are, but if not I can do some of this for anyone who might need them. I have been using the program LIST, share ware, to search the Digests for topics from time to time, it works great. Found a reference to transformer lamination material on the first try the other day.

I hope the next 1000 Digests are as great as the last 635 have been...

Larry
va3lk / wa3zia

From boatanchors@theporch.com Thu Oct 31 13:24:01 1996
From: "Jim Evans:RSE:PK3-1/N85:dtn 223-6277:(508)493-6277 30-Oct-1996 1640" <j_evans@proxy.ENET.dec.com>
Subject: docs needed for APT-5, APR-9, ARC52 and Tecraft 6M tx (TR20-50)
Message-ID: <9610302144.AA29961@us4rmc.pko.dec.com>

I would like to find manuals and/or schematics for the following.

T85/APT-5

TN-129B/APR-9

RT332/ARC52

Tecraft 6M transmitter TR20-50

Copying costs and postage will be reimbursed. Let me know what
you have first.

Thanks

Jim N1HTS

p.s. also looking for a 8.400Mhz crystal for the Tecraft or
6M Gonset

From boatanchors@theporch.com Thu Oct 31 10:17:51 1996
From: "Jim Berry" <basalop@eskimo.com>
Subject: DX-40 Part Needed
Message-ID: <199610311055.CAA02814@mail.eskimo.com>

Hi Gang,

I have a Heath DX-40 that I want to put back on the air. I was lookiing it over and remember that when I picked it up it did not have an RF plate choke. At the time, I grabbed a 3.5 Mhy choke out of my junk box, and it fired up and worked just fine. The Heath manual shows a drawing of what the choke may have looked like, but that is all the info it presented. I do have a nice 1/2 inch diameter, 3 or 4 inch long ceramic coil form that could be wound to be a plate choke. I could use it since it looks like the one in the Heath drawing. I just need to know the wire size and how many turns they used. Anyone out there got their DX-40 out of the cabinet or maybe a spare original plate choke?

73 Jim K7SLI

***

Jim Berry K7SLI. QTH: Marysville, Wa (Near Seattle)
Email: basalop@eskimo.com FAX: 360-659-1360

Ham Digital: K7SLI @ K7SLI.#NWWA.WA.USA.NA
***

From boatanchors@theporch.com Thu Oct 31 13:24:01 1996
From: John Wieder <jwieder@gunnison.com>
Subject: FRG7 Rcvr info needed
Message-ID: <199610302014.NAA20194@gunnison.com>

Dear List members:

I have seen this rcvr mentioned a couple times recently on the list and there is one for sale locally. Is this a tube type rig? Could anyone give me an idea of the value of a FRG7? Tnx for your help. John   WA0JYJ
jwieder@gunnsion.com

From boatanchors@theporch.com Thu Oct 31 13:24:01 1996
From: KB9VU@aol.com
Subject: FS: SB-230
Message-ID: <961030141629_134370470@emout01.mail.aol.com>

Heathkit SB-230 Amp with original manual. 9 to 9+ cosmetics and + inside.

$425 plus shipping. Would prefer a pickup as this is a heavy amp. Can arrange delivery if you're close to St. Louis or plan to attend the FT. Wayne Hamfest next month. Also open to trade for an SB-220 in nice shape for the 230 and some cash.

Mike - KB9VU

From boatanchors@theporch.com Thu Oct 31 13:24:01 1996
From: Steve Ellington <n4lq@iglou.com>
Subject: FS: 75A4
Message-ID: <Pine.GSO.3.93.961030134719.27437A-100000@iglou1>

Ser. 668
Original execept the very effective AGC mod in ER
Excellent 9+ conditon
PTO is in perfect condition

All knobs, glass, lettering, feet, connectors in excellent cdx and original.

With 3.1kc filter $500 + shipping
With 3.1 and 500cps cw filter $785 plus shipping.

Steve Ellington N4LQ@IGLOU.COM Louisville, Ky

From boatanchors@theporch.com Thu Oct 31 13:24:01 1996
From: Bill Sorsby <bill.sorsby@dlep1.itg.ti.com>
Subject: Re: FS: 75A4
Message-ID: <199610302023.OAA26920@lesol1.dseg.ti.com>

At 12:52 PM 10/30/96 -0600, you wrote:
>Ser. 668
>...
>With 3.1kc filter $500 + shipping
>With 3.1 and 500cps cw filter $785 plus shipping.

Ummh, do those prices include the matching speaker, Steve? <chuckle, chuckle>

From boatanchors@theporch.com Thu Oct 31 13:24:01 1996
From: Peter Heimbach <karl@tyrell.net>
Subject: Galaxy Manuals Needed
Message-ID: <Pine.SUN.3.91.961030151807.21624A-100000@tyrell.net>

Picked up a Galaxy V Mark III and a Galaxy GT-550 at the Lake Charles, LA hamfest. Both receive and transmit but are in dire need of alignment.

I'm looking for a copy of a manual and the schematic for each rig and would appreciate it if someone could help.

I'll of course reimburse for copying and mailing costs.

Tnx... de Karl - KD5LR

From boatanchors@theporch.com Thu Oct 31 10:17:51 1996
From: gcr2@po.CWRU.Edu (George C. Rybicki)
Subject: Gen Coverage 75-S3
Message-ID: <199610311458.JAA02239@piglet.INS.CWRU.Edu>

I know the thread was last week but when I was toying with general coverage for my 75S3 i just ran the output of my eico sig gen into the xtal oscillator input of the RX. ˇAfter I ˇ˚found a signalˇ˚ I

recognized I nudged the eico ˇuntill it was on the right freq
and away I ˇwent SWLing. Stability was adequˇate even better than I expected.
73 George

From boatanchors@theporch.com Thu Oct 31 13:24:01 1996
From: "Barry L. Ornitz" <u856010@eastman.com>
Subject: Home-Brewing Vacuum Tubes
Message-ID: <Pine.ULT.3.91.961030142924.11786A-100000@dua150.kpt.emn.com>

This subject comes up periodically on this group and it stirs up lots of speculation. Based on what I have read about the requirements of vacuum tube manufacturing from the following two references, I will firmly state that I believe home-brewing of a vacuum tube of the likes of an 807 is completely impossible. Is it possible to make even any kind of vacuum tube at home? Of course it is, but an individual with even the best equipped home shop is never likely to get beyond a simple DeForest audion - low gain and gassy.

People have suggested using mercury diffusion pumps for high vacuum. Well high vacuum means different things to different people. For a good vacuum tube, you need absolute pressures several orders of magnitude lower than even the best mercury diffusion pump will deliver. You could probably come up with a reasonable copy of a mercury vapor rectifier, however.

Probably the best proof that homebrew tube manufacturing cannot be done at home is to look at the quality of the import Chinese tubes. These are made by commercial companies having access to technology not available to the average ham - and these tubes still suffer from short life, outgassing problems, and overall quality levels that would have been considered rejects in the former U.S. plants.

The theoretical aspect of manufacturing a vacuum tube is pretty simple. The actual practice is not - which means that unless the Russians and Chinese are successful in their efforts, we will eventually be without working tubes for our equipment.

References...

```
               Title: Handbook of electron tube and vacuum techniques.
              Author: Rosebury,F
    Publication info: Reading, MA, Addison-Wesley, 1965
Physical description: 597P
   Organization Code: TK7872.V3 ROS 1965 1 RES-LIB BOOK
            Language: ENG
             Held by: RES-LIB
            Keywords: Vacuum tubes,; ELECTRON TUBES; VACUUM TUBES
```

Title: Materials and processes of electron devices
Author: Knoll,M
Author: Kazan,B
Publication info: Berlin, Germany, Springer-Verlag, 1959
Physical description: 484P
Organization Code: TK7870 KNO 1959 1 RES-LIB BOOK
Language: ENG
Held by: RES-LIB
Keywords: Apparatus and appliances,; VACUUM TUBES - MATERIALS; ELECTRONICS - MATERIALS

73, Barry L. Ornitz WA4VZQ ornitz@eastman.com

From boatanchors@theporch.com Thu Oct 31 13:24:01 1996
From: "Paul Bock" <pauboc@smtplink.pulse.com>
Subject: Homebrew tubes (and everything else!)
Message-ID: <9609308467.AA846708746@smtplink.pulse.com>

Those contemplating homebrew tubes might want to read "200 Meters and Down" by Clinton B. DeSoto. There is mention of a teenage ham from a very poor family who, during the Depression, built an entire CW station (receiver, transmitter, etc.) into a small closet in his home, and built it entirely out of scrap materials from the junkyard and other peoples' trash. He *hand-manufactured* his own resistors, capacitors, transformers, key, headphone, etc., and even built his own vacuum tubes using glass containers discarded by a local chemical firm. According to the book, the only items he didn't actually build himself were a second-hand vacuum pump and a pair of pliers!

The station, while certainly not "world-class," was highly functional and effective; so much so, in fact, that those who didn't know him assumed he was using commercial equipment or at least equipment manufactured from commercially-manufactured components.

Now, there's a challenge for a homebrewer.....

73,

Paul, K4MSG

From boatanchors@theporch.com Thu Oct 31 10:17:51 1996
From: Paul Bernhardt <bern@ppdu.nrl.navy.mil>

Subject: I-177 tube tester meter
Message-ID: <Pine.A32.3.91.961031093708.37641B-100000@ppdu.nrl.navy.mil>

Gang,

I have a I-177 tube tester with a sticky meter. The meter is sealed and has 1.4 mA full scale with 80 ohms resistance. Has anyone tried to open up such a meter for repair? Or should I just replace the meter and crack the glass face to access the scale for replacement on the new meter.

Advice and experience gratefully accepted.
Paul Bernhardt, KF4FOR

From boatanchors@theporch.com Thu Oct 31 10:17:51 1996
From: arc5@ix.netcom.com (David Stinson)
Subject: ID DOGBONE CABLE
Message-ID: <199610311309.FAA11161@dfw-ix9.ix.netcom.com>

Trying to ID a dogbone cable. It looks "British," WW-II style with the big, wide-spaced pins and the flat phenolic faces. One large connector of 12 pins and a smaller one of six. The connectors are the "push-on, captive" type; that is, they are not threaded but use some type of locking ring in the socket to hold them in place.

There is a nomenclature plate:

NO. 201 6/12 PT.
PC/USA 59949
ZA/USA 1049

The connectors and backshells are marked.

12 pin backshell marking: ZA/US10625
12-pin connector marking: ZA/US10624
6-pin connector marking: ZA/US10631
6-pin connector marking: ZA/US10630

Anyone got a clue?

TNX ES 73 DE Dave AB5S
arc5@ix.netcom.com

From boatanchors@theporch.com Thu Oct 31 10:17:51 1996
From: wi2p@VNET.IBM.COM
Subject: Johnson Thunderbolt - Static Current problem

Message-ID: <199610311527.JAA00467@uro.theporch.com>

Still working on my Thunderbolt. Got it all cleaned up, voltage and resistance measurements are all within spec as per the manual. Now the problem, the static current doesn't fall within the specs. As instructed in the manual, I removed the excitation from the amp (w/amp output going into a dummy load). I key the exciter to switch from blocking bias to operating bias. Blocking bias is close to spec at -148 volts, with operating bias at -73 volts. The specs call for a static current of between 200 and 300ma. This corresponds to some info I have from various tube manuals that indicate a static current of 95 to 125ma per tube in class AB1 operation. In my case I'm getting roughly 360 to 380ma of static current, far too high. I checked each tube individually and they are drawing roughly 190 to 200 each. The screen voltage is close to spec (I'm getting 540 volts, spec calls for 510). Plate voltage is 2200 volts. Blocking/ operating bias is right on (-148/-73, manual calls for -150/-75). Any ideas what to look for as to why the static current might be too high? Several other Tbolt owners indicate their rigs static currrent is right about 250, which is the expected median, acceptable range being 200 to 300ma.

Please help save this BA amp!

73, Ray WI2P   wi2p@vnet.ibm.com

From boatanchors@theporch.com Thu Oct 31 15:58:53 1996
From: 4CX250B@miavx1.acs.muohio.edu
Subject: Re: Johnson Thunderbolt - Static Current problem
Message-ID: <v03007800ae9e8f782f03@[134.53.5.143]>

>Still working on my Thunderbolt. Got it all cleaned up, voltage and resistance
>measurements are all within spec as per the manual. Now the problem, the
>static
>current doesn't fall within the specs. As instructed in the manual, I removed
>the excitation from the amp (w/amp output going into a dummy load). I key the
>exciter to switch from blocking bias to operating bias. Blocking bias is close
>to spec at -148 volts, with operating bias at -73 volts. The specs call
>for a static current of between 200 and 300ma. This corresponds to some info
>I have from various tube manuals that indicate a static current of 95 to 125ma
>per tube in class AB1 operation. In my case I'm getting roughly 360 to 380ma
>of static current, far too high. I checked each tube individually and they
>are drawing roughly 190 to 200 each. The screen voltage is close to spec (I'm
>getting 540 volts, spec calls for 510). Plate voltage is 2200 volts. Blocking/
>operating bias is right on (-148/-73, manual calls for -150/-75). Any ideas
>what to look for as to why the static current might be too high? Several other
>Tbolt owners indicate their rigs static currrent is right about 250, which is
>the expected median, acceptable range being 200 to 300ma.
>

>Please help save this BA amp!
>
>73, Ray WI2P   wi2p@vnet.ibm.com

Sounds like your operating bias is too low. Are you sure you're measuring -73V when HV is applied to the tube and it is drawing idle current? Also, you might check your metering circuit to make sure its accurate. Otherwise, it's hard to see what could be wrong.
Jim W8ZR

From boatanchors@theporch.com Thu Oct 31 13:24:01 1996
From: Sheldon Wheaton <swheaton@sky.net>
Subject: Re: Johnson Thunderbolt adjustment Info
Message-ID: <Pine.GSO.3.93.961030152643.11319A-100000@sky.net>

On Sat, 26 Oct 1996 wi2p@VNET.IBM.COM wrote:

> Does anyone have an E.F. Johnson manual for a Thunderbolt amplifier that explains how to set up the plate tuning ganged roller inductor/variable capacitor? My manual (not the kit manual, but for the factory wired version) shows how to restring the plate tuning indicator but does not say where the plates of the variable capacitor should be when the dial pointer is aligned with the 0 or 100 indicator and the roller inductor is at one end of its travel. I want to be sure this Thunderbolt I am working on is aligned properly.
>
> 73, Ray   WI2P   wi2p@vnet.ibm.com

Hi Ray and fellow Thunderbolt owners,

I recently purchased a Thunderbolt, and with it received an assembly manual. The following is from that document:

In the section titled "Plate Circuit Mounting":

Adjust the roller contact of L4 so it comes to rest at the front end of the winding. Adjust C3 so its rotor plates are fully meshed. Tighten the set screws on the hub of the gear, D18C. At this time rotate D18B (by temporarily attahing a large spinner knob) over full range of L4 to check smoothness of operation. Loosen slightly and retighten berainings or mountings as necessary to obtain best operation. Return roller on L4 to front position.

In the section titled "Front Dial Drive and Knobs":

1. Secure D3, the 3" diameter pulley to D6 (bearing and shaft assembly). Orient the pulley so that with C3 (variable plate capacitor) fully meshed, the slot points up. See Figure E.

2. Make up the dial drive cord as in figure E and string as shown.

3. Place the dial pointer on the cord so the center of the pointer is 3/4" away from the center of lower left hand pulley. Crimp the cord gently between teh pointer fingers taking care not to cut the cord. Place a drop of household cement on this point.

4. Remove the two nuts which were put on to retain the two small pulleys on the bottom screw. (Figure 19).

[procedure continues with dial escutcheon assembly]

73,
Sheldon KC0CW

From boatanchors@theporch.com Thu Oct 31 15:58:53 1996
From: pmills@A.crl.com (Phil Mills)
Subject: KWS-1 Help needed
Message-ID: <199610312144.AA11792@A.crl.com>

When I last used my KWS-1 on the air, it behaved differently than usual and differently than what the manual says. I was tuned up in cw mode and reduced the grid drive by dropping back on the "carrier level" control. This is supposed to make the plate current drop slightly as the finals drop into AB1 operation. This time, the plate current went up....well, I slept on it and thought about it and decided that maybe the screen voltage was varying. Put a meter on it today and sure enough, the screen voltage varies almost 100 volts as the grid drive (carrier level) is varied. I've swapped all the tubes in the screen regulator circuitry in the power supply to no effect. Before I tear deeper into the power supply, I though I'd ask for info or suggestions....is the "regulated" screen supply supposed to vary this much? Anyone seen a similar problem before?

thanks & 73,
Phil
.
Phil Mills, AB5TH   **** Wanted -- 1957 ARRL Handbook   *****
pmills@a.crl.com
713-992-5762
Friendswood, TX   (south of Houston)

From boatanchors@theporch.com Thu Oct 31 15:58:53 1996
From: rdkeys@csemail.cropsci.ncsu.edu
Subject: Looking for copy of scarce early manuals
Message-ID: <9610311835.AA109141@csemail.cropsci.ncsu.edu>

I am looking for copies (clear xerox is fine) of manuals to any of the
early RCA/RMCA ET-36xx series transmitters. Anyone got any of these?
I know, it is a cold day in hades, right.....(:+}}.....   Thanks!
Bob Keys/NA4G

From boatanchors@theporch.com Thu Oct 31 15:58:53 1996
From: wally@mindy.sys.sdl.usu.edu (Wally Gibbons)
Subject: Manual Help-RCA
Message-ID: <9610312007.AA08238@mindy.sys.sdl.usu.edu>

Hi and Happy Holloween,

Just bought an RCA Standard Impedance Bridge at the local university surplus
cash & carry/bid sale (not a bad place to pick up BA test equipment, by the
way!) for 5 bucks. Looks like it will measure Q, dissipation factor,
resistance, capacitance, and inductance. It is a TYPE LB-52. Another
number which may help identify it is M1-30252. Anyone have a manual
I could get a copy of?? Of course will re-imburse shipping/copying costs..

These university bid sales are starting to have lots of old test gear.
I passed on a Tek 545-S6 for 10 bucks, 4 or 5 HP SHF generators, one SUHF,
and one which covered 9-12 ghz approx. All for 5 bucks each. HP scopes, etc.

Worth checking out if there's a university in your area...

Wally Gibbons, WB7ASQ
wally@mindy.sys.sdl.usu.edu
Logan, Utah

From boatanchors@theporch.com Thu Oct 31 13:24:01 1996
From: mknudsen@lucent.com
Subject: NC-173 Report
Message-ID: <9610302125.AA00681@bock.ih.lucent.com>

Last nite I got the NC-173 working, mostly, so here
are my impressions and a few things I found.
(BTW, votes are running 100% in favor of gray over black knobs,

except the -R rackmount model might have had blacks -- tnx to everyone who responded. 183-D is defly black knobs, early 183 is still gray).

I did this one real carefully -- tried forming the dual 8-uF lytic cap with a power supply. Found a hard short to ground. Desoldered some wires, short went away. Turns out that the infamous National trademark octal power plug on the rear apron had a couple extra bare stranded wires in it, and someone had tiwsted these together, so B+ was connect to ground. Who does these things? Maybe the same guy who hotwired the B+ switch inside my HRO-60?

Fixed that, found the cap didn't even need reforming, spliced around the broken fuse holder (temporarily of course), and fired up with no 5Y3 in socket. Good lights, no meltdowns (there were splotches of tar underneath the pwoer xfrmer so I was nervous). Replaced the rectifier, switch on, nice glow from VR tube, and we're up and running. Sort of.

Stone dead but for some hum and scratching from the AF Gain knob. Hmmm, how come the VR tube glows *dimmer* on Standby? VOM check shows someone has remounted Stdby/Rcv switch backwards -- Happy Halloween!   OK, so how come no local BC stations on Band A? Oh yes, this is a National, with patented backwards lettering of bands -- Band A is Cordless Phones (aka 6m), Band E is AM BC.

BC band is *very* hot -- good with 4' of wire. On my new Fritzel 80m windom dipole, local BC stations overload to severe distortion. 1.6-4.5 MC band is hot, 4.6-12 MC hot at low end, but towards the top starts showing National's trademark lack of sensitivity -- no noise, no static, no nothin' till you hit a strong station. I don't think an rx is trying hard enuf unless I hear some noise between stations. Even an SX-42 can do better according to some private email.

This AM I was able to hear something near bottom of the top 12-30 MC band, and even a bit of CB. But no background noise at all. Even a National with octal tubes should be better than this? 6m band can hear the cordless phone held next to the rx, so at least the 6J5 is oscillating.

I hope to find more sensitivity in the rx after checking tubes, Rs, and Cs. Alignment trimmers get results so I think the coils are OK. Antenna trimmer tunes *very* sharp on most bands.

Construction quality is almost military -- subcircuits along the chassis sides, including 0.01 "mica" caps that are surely paper, plus wax-paper firecrackers. And in the past someone replaced and upgraded many of the wax papers with -- drum roll -- Cornell Black Uglies! Front end has all ceramic tube sockets, and the ultra-linear main tuning cap (3 gangs) must be seen to be appreciated. The main dial is quite linear from start to finish -- too bad National didn't think to calibrate the knob and have precision readout like Collins and later Drake.

There seems to have been a cover plate over it, judging by screw holes and guides -- anyone's NC-173 have a cover over the tuner?

AGC circuit is interesting -- a separate final IF stage just to drive the AGC diode, possibly with a negative bias to set the threshold. AGC drive is so strong that National's S-meter is just connected from AGC bus to ground thru a series resistor. Reads properly even when you turn down the manual RF gain, unlike cheap rx like the 75A4 and 51J3 :-). The AVC switch just kills B+ to the special IF stage, neat.

Just for grins, someone remounted the AVC/MVC switch backwards too. Maybe this rx is the Earth-based version of the "This Island Earth" Interociter aptitude test...

Selectivity is good as-is, and the xtal filter seems to work well. But xtal switch needs jiggling sometimes -- may be losing IF senistivity right here. Hard to spray DeOxit since it's inside the filter box.

BFO doesn't work yet at all, and again the switch is inside the coil can, tnx a lot. Also the switch on the (replacement?) ANL pot is stuck on, so the audio is always distorted a little -- maybe fixing this will clean up the strong BC stations, tho not the cross-mod.

Nice feel to tuning (identical system to HQ-129X and most HQs), very pretty dials with all sorts of helpful markings. Unforch, some fading and flaking has affected my dials, tho not on the numbers and hash marks.

This could turn into one of my fave rx for casual work, meriting a new 3-wire cord and fuse, and further clean up. Maybe even a full set of gray knobs with the right skirts? I've had offers of trades of 1 - 3 knobs, but don't want to end up half and half.

From boatanchors@theporch.com Thu Oct 31 13:24:01 1996
From: Tom Kelly <tjkelly@apk.net>
Subject: NTIS R-390A manuals unavailable
Message-ID: <3277AF4F.3CC6@apk.net>

Greetings,

I just tried to buy from NTIS the two parts manuals for the R-390a: TM 11-5820-358-20P and TM 11-5820-358-34P. I was told the first is restricted and hence unavailable and that the second is out-of-stock and will not be reprinted.

Anyone have any suggestions?

Thanks,

Tom
--

Tom Kelly
Novelty, Ohio (east of Cleveland)

mailto:tjkelly@apk.net

From boatanchors@theporch.com Thu Oct 31 15:58:53 1996
From: cmthomp1@facstaff.wisc.edu (Clark M. Thompson)
Subject: Re: OB2 with orange glow?
Message-ID: <199610311703.LAA31122@audumla.students.wisc.edu>

Thanks to all who responded to my post. And special thanks to Hank van Cleef for the physics lesson-- verrry interesting.

I have a new appreciation for these particular firebottles as they glow in the dark!

73,

Clark, KD9QI

cmthomp1@facstaff.wisc.edu

From boatanchors@theporch.com Thu Oct 31 10:17:51 1996
From: radionostalgia@serv2.fwi.com (Jack C. Shutt)
Subject: Odds and Ends Needed
Message-ID: <199610311527.KAA08416@serv2.fwi.com>

Hello BA Enthusiasts:

I thought I would put together a "wish list" for parts
that I need to complete several restoration projects

this winter. Maybe someone out there in BA land will have some of these items or know where I can get them. It also might be possible that someone might have some "parts sets" which could provide some of these items.

I need the following items:

1. main tuning dial for NC-183 (not 183D)
2. NC logo for National speaker
3. 2 large original tuning and bandspread knobs for HQ-129X.
4. 1 large tuning or bandspread knob for S-38C.
5. good front panel for Globe Chief 90 xmtr.
6. good front panel for Globe Scout 65 xmtr.
7. good front panel for AT-1 xmtr.
8. meter and good front panel for DX-35 xmtr.
9. power transformer for a Multi-Elmac PSA-500 power supply (for A-54H xmtr).
10. plastic dial window for Echophone EC-1 rcvr.
11. cabinet for Eico 722 VFO (paint condition not important if no holes or dents)
12. top and bottom covers for R-390A rcvr.

I'm also looking for information on a TRANSMETER MODEL 905 f.s. meter/ mod meter manufactured by Electronics Specialty Co. In LA, Calif.

Anyone know of someone who is restoring/ silkscreening Johnson Ranger front panels?

Last, but not least, looking for Rider's manuals #3,5 and 15-up. Condition is not important if they are readable.

Thanks for taking the time to read this and look through your junk box!

73, Jack, N9GT

****

Jack C. Shutt, N9GT
radionostalgia@mail.fwi.com
(219)493-3901

From boatanchors@theporch.com Thu Oct 31 13:24:01 1996
From: ZIO76@ccmail.ceco.com
Subject: Ordering Catalogs Mentioned On BA
Message-ID: <9609308467.AA846701286@ccmail.ceco.com>

[begin soapbox mode]
I felt kind of rotten yesterday when I opened a ten pound box which was express shipped to me by MSC. This is the catalog mentioned a few times last week as a good source for drill bits of all kinds.

This catalog + shipping had to cost MSC at least $20, probably more; it is huge, hard cover bound with thousands of pages. The reason I felt bad is because I really feel as though they wouldn't have sent such a costly item to someone with only a casual interest. This is an expensive industrial catalog. I intend to bring it to work now and give it to our Mechanical Engineering department.

I know some will disagree with me, but I thought I would make this post just to say that in the future, I will not blindly order catalogs. I think the "Golden Rule" applies to businesses too!
[end soapbox mode]

Chuck ai3o

From boatanchors@theporch.com Thu Oct 31 10:17:51 1996
From: w4bld@juno.com (Robert B. Kerby)
Subject: Original Manuals FS
Message-ID: <19961031.095406.5071.3.W4BLD@juno.com>

Hello Gang -

I have the following manuals from an estate. They were priced by others; I am only the messenger and the operative. If you can use any of them please contact me at once. The last batch I had sold out in 24 hours. Thanks!!

COLLINS
KWM 5th Ed, 1 Aug 1960 ($30.00 + $3.00 Shipping)
51S1/1A/1F/1AF Ed 1 Mar 1965 ($35.00 + $3.00 Shipping)
Collins Industrial Catalog ($10.00 + $3.00 Shipping)
354A1 Mech Filter Conv kit for use with 51J2 and 51J3 Rcvrs 2nd Ed 15 June 1955
($25.00 + $3.00 Shipping)
32S1 Ed 15 Sept 58 ($35.00 + $3.00 Shipping)

75S1 Ed 15Sept 58 ($35.00 + $3.00 Shipping)
Amateur Radio Eqpt. Catalog 1963-64 ($25.00 + $3.00 Shipping)

NEMS CLARK

Mod 1401 A Telementry Rcvr ($15.00 + $3.00 Shipping)

TMS

GPR-90 Communications Rcvr 9-56 Ed ($35.00 + $3.00 Shipping)

MISC

Radio Receiving Equipment AN/ARR-1 and Portable Test Osc TS-1/ARR-1 ($20.00 + $3.00 Shipping)

Thanks for reading thius message!

Robert B. Kerby - W4BLD
Post Office Box 991
Waynesboro, VA 22980
(540)942-4356   w4bld@juno.com
(I collect Gonset HF gear and Elmac)

From boatanchors@theporch.com Thu Oct 31 13:24:01 1996
From: "Ray L. Mote" <rmote@rain.org>
Subject: Re: R-390A cabinet & Premier Metal Products
Message-ID: <Pine.SUN.3.95.961030114719.1348A-100000@coyote.rain.org>

Their email is: <sales@pmpwest.com>
Think they also have a web page & 800 number; he didn't have the new 800 number handy & didn't get the web info.

73.....Ray Mote, K5FKT <rmote@rain.org> Oxnard, CA ex-W6RIC

From boatanchors@theporch.com Thu Oct 31 13:24:01 1996
From: "RUDOLF H. SALOMON" <rhs@pacbell.net>
Subject: Re: R-390A cabinet & Premier Metal Products
Message-ID: <3277B552.3740@pacbell.net>

Ray L. Mote wrote:
>
> Their email is: <sales@pmpwest.com>
> Think they also have a web page & 800 number; he didn't have the new

> 800 number handy & didn't get the web info.
>
> 73.....Ray Mote, K5FKT <rmote@rain.org> Oxnard, CA ex-W6RIC

Their web page is http://www.pmpwest.com

Regards, Rudy Salomon   KD6NRQ

From boatanchors@theporch.com Thu Oct 31 15:58:53 1996
From: David Adams <adamsclan@netgate.net>
Subject: R390 advice wanted
Message-ID: <3278F00F.56C7@netgate.net>

Greetings! I am having a problem with my motorola r390 would like to know if anyone has had a similar problem (and pointers) before I leap in...I still have to find a manual and/or service manual before I can begin anyway.

Basically, the rig plays fine for the first 45minutes to an hour. After that the signal just cuts out (not a signal problem as my AK and DX-440 hear it just fine and steady all the way through). At this point, it will remain off for a few minutes, come back in for a few...pop back in for a few etc. This happens in AGC as well as MGC mode.

The only mods on the rig that I know of are, a toggle switch to replace the broken contact on the off/standby/etc switch and transformers tacked on the back to replace the shorted jobs inside (I keep meaning to work on that as it is ugly).

Sound familiar to anyone?

73 de dave, n9uxu

From boatanchors@theporch.com Thu Oct 31 15:58:53 1996
From: anders@autopsy.corp.sgi.com (Greg Anders)
Subject: Re: RE:455 kHz CW Filter Availability
Message-ID: <9610311250.ZM25739@autopsy.corp.sgi.com>

On Oct 31, 1:56pm, mknudsen@lucent.com wrote:
> Subject: RE:455 kHz CW Filter Availability
> Michael Knudsen wrote:

> A fine member of this group told me that under the 75A4 there is a perfect
> place where you can clamp in a sheet of copper and feed most any filter
> from wires you add underneath the xtal filter sockets. The copper
> sheet isolates the input from output. All reversible.

```
>>>>>>>> OK, I admit it.... Guilty as charged.
     Its true, I used copper sheet, although any metal will work to fashion
     a isolation shield for the under chassis mounting of an R390 6khz BP
     filter.  I was looking for a way to mechanically mount the filter,
     isolate the input from output and NOT deface or modify the A4 in case
     of the desire to sell it in the future.

     Locating the shield.
     Under the 75A4 I found an open space between the existing vertical
     filter isolation shield (about 2" across) and an adjoining partition
     running 90 degrees to the existing shield.  I fashioned an extension
     to the existing shield with a mounting hole for the 390 filter out of
     the 3" flexible copper foils sold as grounding strap for marine use.
     Now I neede a fastner solution other than drilling holes in the A4
     and suing screws.  Ahha!  I used the adhesive copper tape sold to
     modify PCB groundplanes/lans and used to seal RF leaks in electronic
     chassis.  I taped my copper sheet into place on both ends, wired up
     the filter and chuggalugged a cold 807 or three...  Works great!
     The beer wasn't bad either...



From boatanchors@theporch.com  Thu Oct 31 10:17:51 1996
From: MEC <danmec@inet.uni-c.dk>
Subject: Re: Roberta? .....helloooo Roberta
Message-ID: <Pine.3.89.9610310915.A16819-0100000@inet.uni-c.dk>

TRY OUR HOMEPAGE TOO :




HTTP://WWW.MEC.DK



73  Rag  OZ8RO

> I would like to ask you some question about your industry.
> May I E-Mail You?
>
> Thanks
> --
> Accurate!
>    Electronics
>
> Roger A. McCarty
> Riverside, CA  USA
> http://www.accurate1.com
```

```
>


From boatanchors@theporch.com  Thu Oct 31 15:58:53 1996
From: Jay Hauteman <caf@airmail.net>
Subject: RE:Scanners for AK radios
Message-ID: <m0vJ0m5-000FZVC@mail.airmail.net>


MORT:

  I don't want to trade fgor your scanners but I have a number
of AK radios that I am getting ready to put on the market.  I
have been collecting AK radios for over thirty years and I am
going to sell all of my AK radios and speakers.  If you are
interested send me an E-Mail with your E-Mail address and I will
send you a list of the radios.  73's

-------------



From:    boatanchors@theporch.com
cc:
From boatanchors@theporch.com  Thu Oct 31 15:58:53 1996
Subject: Scanners for AK radios


I've got two Radio Shack scanners: 1) Pro-2021 200 channel and 2) Pro-32
200 channel handheld.

My interests have switched and I'm into Atwater Kent radios.  Anybody
got something to swap?

Regards,
  Jay - WA5DCG

caf@airmail.net




From boatanchors@theporch.com  Thu Oct 31 15:58:53 1996
From: Dave Hockaday <wb4iuy@ipass.net>
Subject: Septar...
Message-ID: <199610311928.OAA16081@passport.ipass.net>

The word for the 829, 832, etc basing is : Septar. Thanks to the group for
all the responses.
```

Dave Hockaday WB4IUY
wb4iuy@ipass.net

http://www.ipass.net/~hockaday/
http://www.ipass.net/~wb4iuy/
http://www.ipass.net/~teara/
http://www.geocities.com/TheTropics/3349/
http://www.RTPnet.org/~fcarc/
http://www.RTPnet.org/~rdrc/

From boatanchors@theporch.com Thu Oct 31 15:58:53 1996
From: djw@unlinfo.unl.edu (Daniel Wright)
Subject: Simpson VTVM Help Please
Message-ID: <9610312001.AA03137@unlinfo2.unl.edu>

Howdy!

I have a Simpson Model 303 VTVM in excellent physical condition that I'm trying to restore. Does anyone have or know where I can obtain a manual for this beauty? It is fairly accurate on the Ohms and AC scales,but it's a little off on the DC scales. I figure there must be some sort of "cal" pot somewhere for these ranges. I would be most happy to pay for any and all expenses related to photocopying,etc. Thanks...

73 de Dan -- WA0JRD ..
djw@unlinfo.unl.edu

From boatanchors@theporch.com Thu Oct 31 13:24:01 1996
From: Ben Bradley <bradley@norcross.mcs.slb.com>
Subject: re: Smelly Magazines!!
Message-ID: <2.2.32.19961030170758.0031cb6c@norcross.mcs.slb.com>

>Date: Tue, 29 Oct 96 12:57:44 CST
>From: djw@unlinfo.unl.edu (Daniel Wright)
>To: boatanchors@theporch.com
>Subject: Smelly Magazines!!
>Message-ID: <9610291857.AA18547@unlinfo2.unl.edu>
>
>Greetings!
>
>I just aquired a bunch of CQ and QST magazines from the 50's
>and 60's and they really STINK!!!! I guess it's mildew or

```
>something. Doeas anyone have any idea how to un-stink these?
>I just brought five of them to work today and they are drivin'
>folks out of the office (which ain't all that bad (;->)!!!!

   I'm on a book-related mailing list. I hope you find the following
excepts from when this topic was discussed there helpful:

>> But this book is really quite ripe. I can even smell it when I walk
>past the
>> bookshelf on which it sits in my library.
>> Any hints on removing the musty aroma? The book itself shows no signs
>of mildew
>> of anything like that.
>
>I've found that the lack of visible signs of mildew is a good sign that
>a book might be redeemable. But the bad news is the intensity of the
>smell. I've had books with light odors that recovered when set out,
>fanned and dejacketed, on my airy porch for a few weeks (no direct
>sunlight). I've had others that don't react much to that treatment, but
>recover OK when buried in cheap unscented clay cat litter, in a closed
>garbage bag, for a few weeks (or months) - well out of reach of the cats
>, of course. One book dealer I know sprays with unscented Lysol (but I
>don't know how that might affect paper etc.).
>---
>What works for me - at least to some extent (the longer you leave the
>book the better it seems to work) is using kitty litter - wrap the book
>in paper first to protect it, then bury it in a box of kitty litter
>(make sure you cover the box if you have a cat (g)) - leave for a while
>(one week seems to be the minimum - 3 or 4 weeks seems better -
>charcoal and baking soda would do the same thing - but charcoal is
>messier and baking soda more expensive.

       Ben Bradley, Design Engineer
       Schlumberger Measurement & Systems
       Meter Communication Systems (MCS)
snail: 3155-B Northwoods Parkway
       Norcross, GA 30071-1576 USA
email: bradley@norcross.mcs.slb.com
voice: 770-368-3444 ext. 3191
fax:   770-840-8614



From boatanchors@theporch.com  Thu Oct 31 15:58:53 1996
From: Dave Hockaday <wb4iuy@ipass.net>
Subject: Sockets for 832, 829
Message-ID: <199610311729.MAA11092@passport.ipass.net>
```

What is the name the basing of those goofy looking little tubes??? Heptar, errr...starnoid....ehhh... I can't remember that cool sounding word.

Dave Hockaday WB4IUY
wb4iuy@ipass.net

http://www.ipass.net/~hockaday/
http://www.ipass.net/~wb4iuy/
http://www.ipass.net/~teara/
http://www.geocities.com/TheTropics/3349/
http://www.RTPnet.org/~fcarc/
http://www.RTPnet.org/~rdrc/

From boatanchors@theporch.com Thu Oct 31 13:24:01 1996
From: Bob Roehrig <broehrig@admin.aurora.edu>
Subject: Some cures for HRO's
Message-ID: <Pine.ULT.3.95.961030133651.12508A-100000@admin.aurora.edu>

Have been refurbishing and applying a couple mods to the old HRO (5 maybe) that I picked up last week. First cleaned the grunge, then stripped and repainted the front panel. I added a 6BE6 product detector, redid the AGC, and it plays real well. I offer the following 2 hints that are easy to apply:

1) To prevent the S-meter from banging against the pin, simply install a 120 ohm resistor in series with the negative meter lead, then add a germanium diode across the leads (anode to plus side of meter - cathode to junction of resistor and lead coming thru chassis).
It now clamps right at full scale.

2) A change in signal strength causes some drift, up and down. Add a 105 volt regulator tube connecting it from the HF osc screen grid to ground. Add a 47K to 56K 2 watt resistor between pins 2 and 3 of the osc tube, paralleling the 56K already there, then remove the 100K that goes to ground. It will still drift somewhat as you change the RF gain, but not with signal strength changes.

E-mail broehrig@admin.aurora.edu   73 de Bob, K9EUI
CIS: Data / Telecom   Aurora University, Aurora, IL

From boatanchors@theporch.com Thu Oct 31 10:17:51 1996
From: bgraham@tecnet1.jcte.jcs.mil

Subject: Subject: WTB Knob for SB301
Message-ID: <199610311200.HAA26648@tecnet1.jcte.jcs.mil>

Subject: WTB Knob for SB301

I'm looking for a main tuning knob for my SB301.

tnks and 73

Bill
bgraham@tecnet1.jcte.jcs.mil

From boatanchors@theporch.com Thu Oct 31 10:17:51 1996
From: "D.D. Todd" <dube3@n-link.com>
Subject: T-17 Mike Switch needed
Message-ID: <32786CA3.42BC@n-link.com>

I have a T-17 mike that I wanted to use with the ART-13, but I found that the push-button switch is broken. Does anyone have such a thing in the junkbox? Or maybe a T-17 with a good switch?

Thanks to Larry Godek for finding/supplying a dynamotor and connectors, I got the rig fired up yesterday. Everything seems to work, except the CDA section which has no crystals. Haven't had time to check power output and other things yet, but the 24-volt input is 66 amps key-down. Incidentally, this transmitter probably hadn't been fired up in 15 years. I was surprised that it seems to work as it's supposed to.
--
73,
Dube Todd   K4DWW   dube3@n-link.com

If we had to tolerate in others all that we permit in ourselves, life
would
be completely unbearable.
                          - Georges Courtelline

From boatanchors@theporch.com Thu Oct 31 10:17:51 1996
From: mashaum@fcg.net (Mark Shaum)
Subject: Testing 572B's
Message-ID: <M.103196.092247.25@NE9G.statefarm.com>

Mike, KB9VU asks:

> Anyone have the setup to test 572B's on the TV-7D/U tube tester? Thanks!

```
>
> mike - KB9VU
>

Mike, I use the settings for an 811A. Pinout and filament ratings are the same.
Amplification factors are similar.   But note that pulling 4A at 6.3V is a tad
stressful on the TV-7, I wouldn't leave the tube lit for any longer than
necessary.

BTW, regarding amplification factor, I note significant differences between the
original Cetron 572B/T160L (I have one good one of these!)and current imported
572B's that I obtained a year or so back from RF parts.    Perhaps the
Svetlanas are closer to OEM specs, but I don't have one to test.  This would
definitely be a problem if you were running tubes in parallel, so be careful if
mixing tube brands..

73! - Mark

----

Mark Shaum, NE9G
mashaum@fcg.net
```

```
From boatanchors@theporch.com  Thu Oct 31 10:17:51 1996
From: vancleef@netcom.com (Henry van Cleef)
Subject: Re: Tube Life, where does it come from?
Message-ID: <199610310936.CAA13721@netcom19.netcom.com>

As Richard Hager discourses
>
> Henry van Cleef wrote:
>
> ... a very enjoyable and educational post...
>
> --
>
> Hank,
>
> Thanks for another wonderful read.  One thing I have always wondered
> about was how the tubes last so darn long in these Tek scopes.  I have a
> 661 and a couple others that are about 30 yrs old, with thousands of
> hours clocked, and have virtually all original Tek tubes in them!
> Seriously!
```

>
> Is it the fan cooling, does that make a difference to tubes? Lower than 'average' dissipation due to circuit design? The favor of the vacuum gods? Combination of factors?
>
> Most of the tube gear I've worked on over the years, even including expensive rec. studio signal processors, regularly go through tubes every few years. But not these scopes.
>
> What's the magic Hank?
>

I'm not sure that Tek scope tubes lasted longer than anyone else's. I'd question '60's and later tube audio gear instead.

Yes, Tek scopes came with a monster fan inside, which blew a lot of air around, but I think actually cooling was pretty random, sort of like the aerodynamics of a Curtiss pusher biplane----which sank like a stove if you lost power.

Tubes were run well within dissipation limits most of the time. Stan could be more specific, because he worked with scopes that had serious time on them, while most of my work with them was with new production. But I think that some of the vertical amplifier tubes could get pretty soggy, and looking at the horizontal output circuit, particularly on a 585, would make you nervous. There are failure modes that will clean out several tubes as though they were 2N404 geraniums (sic). Trigger circuits with 6U8's kept the 6U8 toob company in business---the 6DJ8's did better. And I remember replacing some 6AS7/6080 pass tubes that might have lasted longer.

Take, for example, a large 1940 RCA console receiver. It might have push-pull 6L6's with 360 volts B+ to the output transformer, 270 volts on the screens, and 88 ma. zero signal cathode current for two tubes. That's below to the 19 watts per tube rated max. plate dissipation. Those 6L6's played Jack Benny, Fred Allen, and Gabriel Heatter until they went off the air, and probably some rock and roll and Elvis Pelvis stuff. In a radio with a 12 inch speaker and maybe a 5 inch "tweeter" and a crossover network bolted into a console cabinet with no baffling, 5 watts would blow the veneer off the cabinet. That operating point, by the way, is the "maximum recommended" set in the 1936 data sheet for 6L6. With a 9000 ohm plate-plate transformer, the specs say they'll pump out 24.5 watts.

Now, jump to 1960. Nobody ran a 6L6 at 360 volts in 1960. I saw one "hi fi" amplifier that had an actual 516 volts on the plates, around 425 on the screens, and still idling away at 80+ ma. 10K plate-plate, and the claim was something like 30 watts into a bookshelf speaker like an AR-2, which was baffled and damped within an inch of its life such that the 6L6 amplifier running full tilt was "a little loud."

You're going from a 6L6 circuit where 6V6's with a little more bias would have given good service and still blown the veneer off the cabinet to one where a pair of 807's would have been working hard. In the sixties, you are in the "small is beautiful" era, and one of the "popular" 60's toob amps is the Fisher job that uses 7591's (if you can find them) with voltages and dissipations up at the moon. And all this thrown at a tube in a T-9 bottle, just like a 6V6. I'm not sure that a 7591 would have been a good survivor in the 1940 design, where there was plenty of cabinet space above the tubes, and where they ran on near-6V6 idling parameters, and at fairly low output power levels most of the time. In the tight Fisher cabinet, any heat that did manage to escape the T-9 bottle didn't go very far. So the tubes outgassed internally, woofed up their getter material and went gassy, and new 7591's were an annual affair. If Tek scopes had eaten tubes with the aplomb of 1960's tube audio, Dumont would have retained most of their market share.

I don't know what studio equipment you are looking at. Most of the stuff I've seen was full of twin triodes that ran OK unless or until they got microphonic. For real tube life, a large receiver like a National NC-100, with 11 tubes in a huge box, 225 volts B+, lasted a long time.

--

==
Hank van Cleef
E-mail vancleef@netcom.com or vancleef@tmn.com
==

From boatanchors@theporch.com Thu Oct 31 10:17:51 1996
From: John Shriver <jas@shiva.com>
Subject: Re: Tube Life, where does it come from?
Message-ID: <199610311522.KAA09833@shiva-dev.shiva.com>

Not all tubes in Tek scopes last that long. Some were pushed really hard. (For instance, the 8233 and 8608 output tubes in the 3A1, 3A5, 3A6, and 3A7.)

However, generally, even if Tek pushed a tube hard, they used it in a circuit where a relatively weak one would still work. I've seen some surprisingly dead 6DJ8's in Tek scopes, that could still be calibrated. Conservative design -- don't expect more out of the tube than it can give you in the long run.

Also, in some of the circuits, good old negative feedback compensated for tube aging.

Of course, much of the equipment really does need calibration every 500 hours. The aging of some of the tubes is compensated for by adjustment pots. For instance, those 8233's in the 3A1/3A6 age fast, but so long as you can adjust the bias setting (trim pot) to pull the plate voltage down to 180V, they're useable.

From boatanchors@theporch.com Thu Oct 31 15:58:53 1996
From: Steve Miller <smiller@motown.lmco.com>
Subject: using other filters for the 75S3B
Message-ID: <199610311633.LAA23068@bear.motown.lmco.com>

Some time ago there were articles in the Collins Journal and the Collins Collector that described using a Yaesue or Kenwood 455 Khz 500hz Cw filter in this radio. The article described a very simple 1 transistor impedance buffer between the filter and the IF. I have the filter tacked in without this transistor amp and even that will work acceptably although the mismatch causes some loss. I have heard the results with the setup the way the article describes and it works very well. Dave Knepper is a list member so he can probably supply the article.
Steve Kd2Ed

From boatanchors@theporch.com Thu Oct 31 15:58:53 1996
From: 4CX250B@miavx1.acs.muohio.edu
Subject: Viking Valiant 1 touch-up and audio mods
Message-ID: <v03007802ae9e967fd5f1@[134.53.5.143]>

Anybody got any cabinet and panel touch-up paint for the Valiant 1? I've got the beast apart to install the W6BM audio mods, and want to clean it up cosmetically as well.

Speaking of the W6BM mods, does anybody out there have direct experience with them? I notice that the mods don't include any negative cycle loading across the modulation transformer, or any diode clipping of negative voltage swings. Has anybody tried these with the W6BM mods?

Thanks,

Jim W8ZR

From boatanchors@theporch.com Thu Oct 31 15:58:53 1996
From: cmthomp1@facstaff.wisc.edu (Clark M. Thompson)
Subject: Re: Viking Valiant 1 touch-up and audio mods
Message-ID: <199610311722.LAA92954@audumla.students.wisc.edu>

>Anybody got any cabinet and panel touch-up paint for the Valiant 1? I've
>got the beast apart to install the W6BM audio mods, and want to clean it up
>cosmetically as well.
>
>Speaking of the W6BM mods, does anybody out there have direct experience
>with them? I notice that the mods don't include any negative cycle loading
>across the modulation transformer, or any diode clipping of negative
>voltage swings. Has anybody tried these with the W6BM mods?
>
>Thanks,
>
>Jim W8ZR
>

Hi Jim,

I did steps 1-5 of the W6BM mods as outlined in the ER article. I decided to do them when I was replacing the drive pot for the second time. This time I used a 25W rheostat-- I didn't want to take the front panel off anymore! The increased size of the rheostat prevented the reinsertion of the 6AL5 clipper tube; hence my motivation to perform the W6BM mods which bypass the clipper.

I stopped short of the mods for the negative peak clipping, and the results have been truly gratifying. On-air reports indicate that my signal now has good low-end response-- gone is the typical "pinched" Valiant audio. Some guys find it hard to believe that I'm running a Valiant!

As for touch up paint, I know that there was someone who advertised in ER that they had the perfect match for the Valiant/Ranger maroon paint. Anyone remember who? I'd like some myself.

73,

Clark, KD9QI

cmthomp1@facstaff.wisc.edu

From boatanchors@theporch.com Thu Oct 31 10:17:51 1996
From: "Ray L. Mote" <rmote@rain.org>

Subject: Re: VT Fuses, equipment destruction (Brit style)
Message-ID: <Pine.SUN.3.95.961031001903.17924B-100000@coyote.rain.org>

1. On the VT fuses, don't think I saw mention that they were developed for the Navy by the Applied Physics Laboratory, Johns Hopkins University. There was a really neat writeup on this in the APL 50th anniversary publication. Just wish I could find the darned thing in my backfiles.

2. From Wireless Set No. 62 User's Handbook:

Deny it to the enemy...
You can't use it, why should he?
Hit it with a brick or hammer,
Crowbar, pickaxe, boot or rammer,
A hand grenade is good they say,
For speeding things along their way.
It reduces them to little bits
And makes quite sure that nothing fits.
Whatever method you may choose,
To make your set unfit to use,
Don't leave a bit for *him* to find,
Don't leave the smallest thing behind.
Hit it, smash it, batter it,
Bury it, drown it, scatter it.
The motto is here for all to see,
DENY IT TO THE ENEMY!

73.....Ray Mote, K5FKT <rmote@rain.org> Oxnard, CA ex-W6RIC

From boatanchors@theporch.com Thu Oct 31 15:58:53 1996
From: RNickels@micro.honeywell.com (Nickels, Bob)
Subject: W.J. Ford
Message-ID: <1996Oct31.130600.1650.368779@smtpmail.micro.honeywell.com>

W.J. Ford Surplus seems to no longer have a web site. Does anyone know if they publish a catalog? Or have their phone number?

Thanks in advance,

Bob KE0T
ranickel@mwci.net

From boatanchors@theporch.com Thu Oct 31 15:58:53 1996
From: Paul Bernhardt <bern@ppdu.nrl.navy.mil>
Subject: Re: W.J. Ford
Message-ID: <Pine.A32.3.91.961031165301.21053A-100000@ppdu.nrl.navy.mil>

Bob,
  I just logged on the W.J. Ford web site at:
http://www.falls.igs.net/~testequipment/

Paul Bernhardt, KF4FOR

On Thu, 31 Oct 1996 RNickels@micro.honeywell.com wrote:

>
> W.J. Ford Surplus seems to no longer have a web site. Does anyone know
> if they publish a catalog? Or have their phone number?
>
> Thanks in advance,
>
> Bob KE0T
> ranickel@mwci.net
>
>

From boatanchors@theporch.com Thu Oct 31 10:17:51 1996
From: "Lon W. Cottingham" <k5jv@swweb.net>
Subject: WANTED
Message-ID: <m0vIy7o-000CudC@knuth.mtsu.edu>

Will pay bucks for a like new name plate for the BC-1004 receiver. Will consider a parts unit if the name plate is in good shape. Also need a DS-1 or DS-1A DC to DC converter (DC power supply adapter) for the Kenwood TS-520.

Lon Cottingham
1110 Golden Bear Ln.
Kingwood, TX 77339

From boatanchors@theporch.com Thu Oct 31 10:17:51 1996
From: Michael Crestohl <mc@shore.net>
Subject: Which lubricant is best for BA mechanical systems???
Message-ID: <199610311124.GAA17019@northshore.shore.net>

Hello All:
I am wondering which is the best all-round lubricant to use for the mechanical

assemblies used in our equipment, such as gear-driven tuning systems. I am particularly looking for some light grease or heavy oil that doesn't congeal or become rancid, gummy, etc.

Any suggestions?

73,

Michael Crestohl,
mc@shore.net

PS: BA Digest 1000? Yay!!!

From boatanchors@theporch.com Thu Oct 31 15:58:53 1996
From: Sandy W5TVW <ebjr@worldnet.att.net>
Subject: Re: Which lubricant is best for BA mechanical systems???
Message-ID: <19961031162121.AAC5009@LOCALNAME>

At 11:27 AM 10/31/96 +0000, you wrote:

>Hello All:
>I am wondering which is the best all-round lubricant to use for the mechanical
>assemblies used in our equipment, such as gear-driven tuning systems. I
>am particularly looking for some light grease or heavy oil that doesn't congeal
>or become rancid, gummy, etc.
>
>Any suggestions?
>
>73,
>
>Michael Crestohl,
>mc@shore.net
>
>PS: BA Digest 1000? Yay!!!
>

Some of the BEST stuff I've ever seen is ROCOL "MTS 2000" grease made by Rocol Ltd., Leeds, England. In the US Dow Corning "Molykote" grease is practically the same thing. They are both Molybdenum Disulphate based lubricants, very slippery and slick. The dry "Z" powder can be obtained and mixed with a vehicle like WD-40 and applied to very close fitting surfaces.

73,

E. V. Sandy Blaize, W5TVW
"Boat Anchors collected, restored, modified, traded & used!"
ebjr@worldnet.att.net

417 Ridgewoood Drive
Metairie, LA., 70001
{Still looking for: Hallicrafters SR-75, and 860 tubes!}

From boatanchors@theporch.com Thu Oct 31 10:17:51 1996
From: "Thomas A. Adams" <103360.2133@CompuServe.COM>
Subject: Whistlers and VLF phenomena website
Message-ID: <961031160644_103360.2133_JHL100-1@CompuServe.COM>

Greetings, Troops!

I haven't been too active on BOATANCHORS lately; too many other things going on,, but I found a website that a lot of BA fans will find fascinating.

Those of you that are into long wave and VLF reception (like me) have at least a passing familiarity with the phenomena knows as "Whistlers", "Dawn Chorus", and "Tweeks" that inhabit the electromagnetic zoo below 20 KHz. I heard my first whistler (tho I didn't recognize it for what it was at the time) in the '60s; I was listening to WWVL on an old RAL-7 (nominally 20 KHz, modulated by sharp frequency jumps in 100 Hz increments), when suddenly a whistler went sweeping thru the signal, momentarily wiping it out.

For those who aren't familiar with sferic emission phenomenon; these signals are naturally produced in the earth's magnetosphere. They can be generated by lightning, auroral activity, keying transients on high power VLF transmitters running CW, and, interestingly, atmospheric nuclear explosions.

The variety of signals is wierd, unbelievable, and fascinating.

Anyway...   The University of Iowa has a website attached to the NASA program for high school science students (INSPIRE) which has some of the most excellent recordings (in .WAV format) that I've ever heard. They were done by Steve McGreevy, and it's apparent he's REALLY into this; his thing seems to be going to such Gawdforsaken places as North Dakota, Alberta, the Alvord Desert (look it up, I won't tell!), and the Kenaii Peninsula of Alaska to record this stuff. It seems like he's willing to go ANYWHERE where there's no AC power distribution systems to generate hum in his receivers. The Alaskan stuff is from an area INSIDE of the "Auroral Oval" (the magnetic polar region where visual aurara displays form), and is especially unusual.

BTW, when the Voyager space probes passed Jupiter, the broadband radio receivers aboard picked up whistler activity THERE, emitted from the Jovian magnetosphere!

In any event, check out   HTTP://WWW-PW.PHYSICS.UIOWA.EDU/MCGREEVY/

The stop is WELL worth the time of any radio nut, and even tho the ZIPped files are kinda big they're worth the effort to download.

73's,

Tom, K9TA

From boatanchors@theporch.com Thu Oct 31 10:17:51 1996
From: "Brian Carling" <bry@mnsinc.com>
Subject: WRL Duo 84 Schematic copy needed
Message-ID: <199610311204.HAA08237@user2.mnsinc.com>

Hello guys,
I need the schematic / circuit diagram AND/OR a manual copy for a WRL Duo-Bander 84 rig. I'll be glad to pay the usual copying & postage if someone can help me out with this.

Please e-mail me. Many thanks & 73 de AF4K / G3XLQ
Bry
73 from Radio AF4K / G3XLQ in Gaithersburg, MD USA
bry@mnsinc.com
*** See the great ham radio resources at:
http://www.mnsinc.com/bry/

From boatanchors@theporch.com Thu Oct 31 13:24:01 1996
From: mknudsen@lucent.com
Subject: WTB Swan 500C VOX unit
Message-ID: <9610302038.AA00665@bock.ih.lucent.com>

Say, I don't suppose someone has one of these banging around in their spares box they'd be willing to sell reasonably priced?
Or maybe the whole xcvr so ratty that yanking the VOX off the back is the best thing to do?

BTW, what should I expect to pay for the little beastie if one turns up?
FWIW, I have a 500C, not a 500CX. 73, mike k aa9rg